

COURSE APPROVAL DOCUMENT
Southeast Missouri State University

Department: Psychology_____

Course No. _PD512____

Title of Course: ___Neuroanatomy Laboratory_____

Date: _August 1, 2015____

Please check: New
 Revision

- I. Catalog Description (Credit Hours of Course): This laboratory involves observation of morphological characteristics of the CNS and regions involved in neurocognitive and neurobehavioral functions (2).
- II. Co- or Prerequisite(s): PD511, Fundamentals of Neurosciences (co-requisite)
- III. Purposes or Objectives of the Course (optional):
- 1) Identify microscopic and macroscopic structures of the human brain.
 - 2) Identify structures responsible for adaptive brain and body physiology.
 - 3) Identify structures responsible for adaptive psychological processes including senses, movement, perception, memory, emotion, motivation and executive functions.

Add additional Objectives as needed

- IV. Student Learning Outcomes (Minimum of 3):
- 1) The student will identify structures of the human brain that are related to sensation, perception, and movement, and describe the functional relationship.
 - 2) The student will identify structures of the human brain that are related to memory and executive function and describe the functional relationship.
 - 3) The student will identify structures of the human brain that are related to memory and emotion and describe the functional relationship

Add additional SLOs as needed

- V. Optional departmental/college requirements:

A.
B.

- VI. Course Content or Outline (Indicate number of class hours per unit or section):

A. See class syllabus attached.
B.
C.

Please Attach copy of class syllabus and schedule as an example

Signature: _____
Chair

Date: _____

Signature: _____
Dean

Date: _____



**PONCE HEALTH SCIENCES UNIVERSITY
CLINICAL PSYCHOLOGY PSY.D. PROGRAM**

SYLLABUS

COURSE TITLE	Neuroanatomy Laboratory
CODING	PSY 512
CREDIT HOURS	2 credits
CONTACT HOURS	24
PREREQUISITE	None
PROFESSOR	See Job Description. Position: Biological Bases of Behavior
TEACHING ASSISTANT	
OFFICE HOURS	
EMAIL ADDRESS	
SEMESTER	

COURSE DESCRIPTION:

The laboratory experience will allow the student to observe the morphological characteristics of the CNS including the spinal cord and its projections, the cranial nerves, the brain stem and peripheral vasculature of the brain. The student will observe the internal structure of the brain at the same time that such information is provided through PSY 511. Special attention will be given to those hypothalamic, limbic and cortical zones that sub-serve the major neurocognitive and neurobehavioral functions.

GENERAL OBJECTIVE:

Identification of the microscopic and macroscopic structures of the human brain with emphasis on structures responsible for adaptive brain and body physiology, and for adaptive psychological processes including senses, movement, perception, memory, emotion, motivation and executive functions.

COURSE CONTENT

Reading for the first laboratory session:
Siegel, Neurons and Glia, Chap. 5: 61-77

LAB 1

Histology of the nervous system:
A. The neuron
B. The brain
C. The spinal cord

LAB 2:

Histology of the nervous system: Sensory receptors

LAB 3:

General Overview of the CNS

LAB 4:

Infratentorial Brain Stem
A. Ventrolateral Aspect

LAB 5:

Infratentorial Brain Stem
A. Dorsal Aspect

LAB 6:

Infratentorial Brain Stem
A. Medial Aspect

LAB 7:

The Cerebellum

LAB 8:

Medial View of the Diencephalon

LAB 9:

Ventral View of Diencephalon

- A. Thalamus
- B. Corpus Striatum
- C. Internal Capsule

LAB 10:

Lateral View of the Cerebral Hemispheres

LAB 11:

Medial View of the Cerebral Hemispheres

LAB 12:

Basal View of the Cerebral Hemispheres

TEACHING STRATEGIES AND ACTIVITIES

Lab discussions

Small group discussions

RESOURCES

- A. The laboratory resources of the school.
- B. Various brain specially prepared to allow visual inspection of different areas and structures.
- C. DVD “Laboratorios: Principios de Neurociencias”. Producciones “Wrath from Heaven”.

STUDENT’S EVALUATION CRITERIA AND GRADING SYSTEM:

100 point practical exam.....90 %

Class participation.....10%

OTHER IMPORTANT INFORMATION**Diversity Statement**

Diversity relates to the acknowledgement of the human condition in all manifestations; its similarities and differences. Diversity seeks to understand different biopsychosocial experiences. It strives towards the human values of equality, respect, and acceptance, within a multicultural world whose boundaries have been overshadowed by technology and globalization. Diversity is the antithesis to oppression in all its manifestations (e.g. sexism, racism, exploitation) and to discrimination in any form, including discrimination due to sexual orientation, physical (dis) Abilities, socioeconomic status, worldviews, places of origin, cultural orientation, primary language, or to any other human characteristic, preference or state.

The notion of diversity is central to the study of human behavior. It requires the development of self-awareness of prejudiced attitudes. It includes understanding of differences in worldviews associated to the psycho-cultural and psycho-economic background of recipients of psychological services. Our training program promotes the awareness of subtle and “invisible” prejudice (e.g. homophobia) acquired during formative years.

Request for Reasonable Accommodations

Students in need of accommodation based on the impact of a disability should contact the professor privately to discuss the specific need. Students with documented disabilities should contact the Academic Deanship Office to coordinate reasonable accommodations.

Attendance Policy

After three absences for a 3 credit course, or 2 absences for a 2 credit course, the student will automatically be dropped from the class unless the professor recommends otherwise. The complete institutional attendance policy is included in the Appendix.

Honor Code Reminder

Any violation of the ethical dispositions of our institution or program will be automatically referred to the corresponding authorities. For the present course, plagiarism may lead to obtaining a grade of “0” on the plagiarized work and this would most probably lead to a failing grade in the course. Students found to violate this policy may be referred to the institutional Promotions Committee with a recommendation of dismissal from the program. The complete plagiarism policy is included in the Appendix.

Note

This syllabus is a guide and is subject to change according to circumstances that may arise during the semester. Students are responsible for all announced changes in the syllabus.

TEXTBOOK

Siegel, A. and Sapru H.N. (2010). Essential Neuroscience. Lippincott Williams & Wilkins

Required Atlas:

Haines, Duane E. (2012). Neuroanatomy: an atlas of structures, sections, and systems. Lippincott Williams & Wilkins

BIBLIOGRAPHY

Nolte, J. (2009). The human Brain and Introduction to its Functional Anatomy. Mosby, Elsevier

Felten D.L. and Jozefowicz R.F. (2010). Netter’s Atlas of Neuroscience. Icon Learning Systems

Nolte, J. (2007). The human Brain in Photographs and Diagrams. Mosby/Elsevier, Saunders

Global Anatomy & Neuro resources at University of Wisconsin-Madison

<http://www.anatomy.wisc.edu/teaching.html>

Neuroscience Tutorial at Washington University School of Medicine-St. Louis, MO

<http://thalamus.wustl.edu/course/>

The Virtual Hospital The Human Brain: Dissections of the Real Brain at Univ. of Iowa

<http://www.vh.org/adult/provider/anatomy/BrainAnatomy/BrainAnatomy.html>

The Whole Brain Atlas at Harvard University

<http://www.med.harvard.edu/AANLIB/home.html>

APPENDIX

INSTITUTIONAL ATTENDANCE POLICY

Attendance at lectures and laboratory exercises is mandatory unless excused because of illness or by previous authorization of the professor in charge of the course. Each department will decide the relative weight to be given to the attendance in calculating the final grade.

Attendance to clinical activities involving patients, patient models, and similar types of activities is considered part of the students' professional responsibility and is mandatory. Absence may be excused after the student consults with the respective department chairperson. Three unexcused absences may adversely affect the final grade for a course.

Incomplete work due to illness or other serious circumstances during the course will be handled according to departmental policies, which must be provided to the students in writing at the beginning of each term. Faculty are not obligated to repeat lecture/laboratory topics that were presented at scheduled times and dates.

PROGRAM POLICY ON ACADEMIC HONESTY AND PLAGIARISM

There are different ways in which a student may incur in one of the various forms of academic dishonesty. Lack of knowledge does not justify academic dishonesty as common sense usually helps to prevent potentially problematic situations. In case of doubt, the standards of academic honesty call for the student to ask the professor or advisor. The most frequent form of academic dishonesty is plagiarism. According to the Random House Webster's college Dictionary plagiarism is: *"the unauthorized use of the language and thoughts of another author and the representation of them as one's own. 2. something used and represented in this manner"*.

Our faculty recognizes that plagiarism in any of its forms and/or manifestation is a serious offense both in the academic and the professional world. Some of the acts that constitute plagiarism are:

- a. Using words or thoughts of authors without giving due credit.
- b. Presenting work done for one course to fulfill the requirements of another course (self-plagiarism).
- c. Taking credit for phrases or ideas of other authors to produce a collage of ideas that have not been created by the student.
- d. Not using quotation marks to identify the exact words of an author.
- e. Taking information from Internet without citing the source.
- f. Buying papers from the Internet or from other sources.
- g. Using another student's paper or clinical report to satisfy course requirements.

Each professor will evaluate alleged cases of academic dishonesty and will proceed to deal with each case according to institutional policies and procedures.